

Search Request Form 14921

Name To back Voc AU 2172 Examiner # 7883 9 Room # AA42 Phone 305-1449 Serial # 39 249 863 Phone 305-1449 Is this a "Fast & Focused" Search Request? (Circle One) YES NO A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at http://ptoweb/patents/stic/stic-tc2100.htm. What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found. (Calculary dage of complature between Gruny and Alapse of Complature between Gruny and Calculary dage. (Calculary dage of complature between Gruny and Calculary and Calculary dage.) (Calculary dage of complature between Gruny and Calculary and Calculary dage.)	03/26/04	Priority Date: 20/1990 Other:
A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at http://ptoweb/patents/stic/stic-tc2100.htm. What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found. Calculated deader of considerable below Squally and information in a class of the dayer of connections.	AU 2172 Examiner # 7888 Room # 4842 Phone 305-19 Serial # 891491867	Where have you searched so far? USP DWP EPO JPO ACM IBM TDB IEEE INSPEC SPI Other
include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found. (Calcular describe that the describe summary, pertinent claims and any citations of relevant art you have found. (Calcular describe that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found. (Calcular describe that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found. (Calcular describe that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.	A "Fast & Focused" Search is completed in 2-3 I meet certain criteria. The criteria are posted in I	hours (maximum). The search must be on a very specific topic and
output hand on the dayee of (connuders a or	include the concepts, synonyms, keywords, acro the topic. Please attach a copy of the abstract, l relevant art you have found.	onyms, definitions, strategies, and anything else that helps to describe background, brief summary, pertinent claims and any citations of
· · · · · · · · · · · · · · · · · · ·	output band on t	the dayee of Connuders or
Date picked up 3/24/04 10:38 ate Completed 3/24/04 2:30 pm		



Set	Items	Description
S1	3982012	CALCULAT? OR COMPUT? OR FIGURE? ? OR FIGURING OR MEASUR?
s2	73	DEGREE() (COINCIDENCE? OR CO() INCIDENCE OR MATCHING OR SIM-
]	LAR? OR RELATIONSHIP?)
s3	14526	(SEARCH? OR QUER? OR QUEST? OR REQUEST? OR QUESTION? OR IN-
	ς	QUIR? OR SEEK? OR FIND? OR LOOK?)(3N)(INPUT OR "IN"()PUT OR W-
	F	RITE)
S4	291245	(INFORMATION OR DATA OR RESULT?)(3N)(RETRIEV? OR RECEIV? OR
		RETURN?)
S5	5884925	DISPLAY? OR OUTPUT OR OUT() PUT OR PRESENTED OR PRESENT OR -
		REVEAL? OR VISUAL OR SHOW? OR EXPOS? OR VIEW?
s6	38	S5 (3N) FEATURE () AMOUNT
s7	, 0	(INFORMATION OR DATA OR RESULT?) (3N) ((HIGHER OR SUPERIOR OR
~ 0	0010	UPPER) () S2)
S8	2910	(LARGER OR GREATER OR BIGGER) () SIZE
S9	1775	(CLOSE()TO OR LYING()NEAR OR NEXT()TO OR ADJOINING OR ADJA- CENT)(2N)(CENTER OR MIDDLE OR MEDIAN OR MIDPOINT)
C10		
S10	150146	COMPUTER(2W) (SCREEN? OR DISPLAY? OR MONITOR?) OR LCD OR CRT OR FLAT() PANEL
s11	0	S1 AND S2 AND S3 AND S4
S11	0	SI AND S2 AND S3 AND S4
S12	0	S1 AND S2 AND S4
S14	Ö	S2 AND S3 AND S4
S15	í	S2 AND S4
S16	173698	
S17	1	S16 AND S6
S18	708	S4 (3N) (HIGHER OR SUPERIOR OR UPPER)
\$19	0	S18 AND S2
S20	0	S18 AND S8
S21	0	S18 AND S9
S22	7	S18 AND S10
·S23	8	S14 OR S17 OR S22
S24	. 0	SIZE AND POSITION AND IMAGE AND S2
S25	0	SIZE AND POSITION AND S2
S26	4	SIZE AND S2
s27	8	POSITION AND S2
S28	15	
S29	14526	,, ,,
		OR QUESTION? OR INQUIR? OR SEEK? OR FIND? OR LOOK?) (3N) (INPUT
		OR "IN"() PUT OR WRITE))
s30	0	
		OR NEXT()TO OR ADJOINING OR ADJACENT) (2N) (CENTER OR MIDDLE OR
m: 1 -		MEDIAN OR MIDPOINT))
rile		Nov 1976-2003/Nov(Updated 040308)
(c) 2004 JPO & JAPIO		
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200419 (c) 2004 Thomson Derwent		
	(C) 2	TOUR THOMBOH DELWENC

28/5/12 (Item 3 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

012910590 **Image available*.*

WPI Acc No: 2000-082426/200007

XRPX Acc No: N00-065689

Image resolution conversion procedure - involves using value of pixel included in interpolation conversion image for output image generation, when obtained difference of pixel value corresponds to specific value

. ..

.

Patent Assignee: OKI DATA SYSTEMS KK (OKID)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 11331595 A 19991130 JP 98145036 A 19980511 200007 B

Priority Applications (No Type Date): JP 98145036 A 19980511

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 11331595 A 13 H04N-001/407

Abstract (Basic): JP 11331595 A

NOVELTY - The value of each pixel included in the interpolation conversion image and fractal conversion image, is compared. When the difference of pixel value corresponds to specific value, the value of pixel included in the interpolation conversion image is used for obtaining the output image. Otherwise, the picture pixel value of pixel included in the fractal conversion image is used. DETAILED DESCRIPTION - Initially, the resolution of the input image for which the scale factor is computed, is converted and an interpolation conversion image is obtained. The input image is then divided into several domain blocks of predetermined size. The range block having size corresponding to that of domain block is expanded corresponding to the scale factor set up for resolution conversion. The high degree similarity of domain block and range block is computed repeatedly. Each domain block of input image is transposed to the domain block and range block having high degree similarity, thereby obtaining fractal conversion image. An INDEPENDENT CLAIM is also included for image resolution converter. USE - For converting image resolution.

ADVANTAGE - Since low frequency component subjected to interpolation and high frequency component of high resolution subjected to fractal filtration are synthesized, image of high quality is obtained. Performs high resolution conversion of image, efficiently. DESCRIPTION OF DRAWING(S) - The figure shows block diagram of image resolution converter.

Dwg.1/9

Title Terms: IMAGE; RESOLUTION; CONVERT; PROCEDURE; VALUE; PIXEL; INTERPOLATION; CONVERT; IMAGE; OUTPUT; IMAGE; GENERATE; OBTAIN; DIFFER; PIXEL; VALUE; CORRESPOND; SPECIFIC; VALUE

Derwent Class: T01; W02

International Patent Class (Main): H04N-001/407

International Patent Class (Additional): G06T-003/40

File Segment: EPI

Set	Items	Description
S1	1255459	
s2	1211	
	II	AR? OR RELATIONSHIP?)
s3		(SEARCH? OR QUER? OR QUEST? OR REQUEST? OR QUESTION? OR IN-
		JIR? OR SEEK? OR FIND? OR LOOK?) (3N) (INPUT OR "IN"() PUT OR W-
		TE)
S 4	175943	(INFORMATION OR DATA OR RESULT?) (3N) (RETRIEV? OR RECEIV? OR
		RETURN?)
s5	119070	S4(S) (DISPLAY? OR OUTPUT OR OUT() PUT OR PRESENTED OR PRESE-
	N	OR REVEAL? OR VISUAL OR SHOW? OR EXPOS? OR VIEW?)
S 6	43	(DISPLAY? OR OUTPUT OR OUT() PUT OR PRESENTED OR PRESENT OR
	RI	EVEAL? OR VISUAL OR SHOW? OR EXPOS? OR VIEW?)(3N)FEATURE()AM-
		JNT?
s7	0	(INFORMATION OR DATA OR RESULT?) (3N) ((HIGHER OR SUPERIOR OR
	τ	JPPER) ()S2)
S8	9755	(LARGER OR GREATER OR BIGGER) () SIZE
S 9	4423	(CLOSE()TO OR LYING()NEAR OR NEXT()TO OR ADJOINING OR ADJA-
	CI	ENT) (2N) (CENTER OR MIDDLE OR MEDIAN OR MIDPOINT)
S10	71626	COMPUTER (2W) (SCREEN? OR DISPLAY? OR MONITOR?) OR LCD OR CRT
	(OR FLAT()PANEL
S11	· 3	S1 (S) S2 (S) S3 (S) S4
S12	3	S1 (S) S2 (S) S3
S13	13	S1 (S) S2 (S) S4
S14	3	S5 (S) S6
S15	1308	S4 (3N) (HIGHER OR SUPERIOR OR UPPER)
S16	0	S15 (S) S2
S17	4	S15 (S) S8
S18	1	S15 (S) S9
S19	10	S15 (S) S10
s20	237	SIZE AND POSITION AND IMAGE? AND S2
S21		S20 AND S5
S22	14	S21 AND S3
S23		S11 OR S12 OR S13 OR S14 OR S17 OR S18 OR S19 OR S22
S24 20 S23 AND IC=G06F?		
File 348: EUROPEAN PATENTS 1978-2004/Mar W02		
(c) 2004 European Patent Office		
File 349:PCT FULLTEXT 1979-2002/UB=20040318,UT=20040311		
(c) 2004 WIPO/Univentio		

and the second of the second o

· -

```
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.
00992407
Pipeline decoding system
Pipeline-System zur Dekodierung
Systeme pipeline de decodage
PATENT ASSIGNEE:
  Discovision Associates, (260275), 2355 Main Street, Suite 200, Irvine, CA
    92614, (US), (applicant designated states:
    AT; BE; CH; DE; FR; GB; IE; IT; LI; NL)
INVENTOR:
  Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA,
    (GB)
  Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley,
    Gloucestershire G11 6BD, (GB)
  Robbins, William Philip, 19 Springhill, Cam, GLoucestershire GL11 5PE,
  Finch, Helen Rosemary, Tyley, Coombe, Wotton-Under-Edge, Gloucester GL12
    7ND, (GB)
  Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)
LEGAL REPRESENTATIVE:
  Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,
    rue Louis Chirpaz, 69131 Ecully Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 897244 A1 990217 (Basic)
                              EP 98202134 950228;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): GB 9405914 940324
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL
RELATED PARENT NUMBER(S) - PN (AN):
  EP 674443
            (EP 953013018)
INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38
ABSTRACT EP 897244 A1
    In a system having a data stream including run level code, the
  improvement characterized by :
     an interfacing token for control and/or data functions in said data
  stream, wherein said token comprises a plurality of data words, each said
  word including an extension indicator which indicates a presence or an
  absence of additional words in said token, a length of said token being
  determined by said extension indicators, whereby the length of said token
  can be unlimited, inverse modeler means active upon said data stream and
  responsive to said token for expanding out said run level code to a run
  of zero data followed by a level, whereby each token is expressed with a
  specified number of values.
ABSTRACT WORD COUNT: 120
LEGAL STATUS (Type, Pub Date, Kind, Text):
                  030416 Al Date application deemed withdrawn: 20020903
Withdrawal:
 Application:
                  990217 Al Published application (Alwith Search Report
                            ;A2without Search Report)
                  990217 Al Date of filing of request for examination:
 Examination:
                            980626
 Examination:
                  990901 Al Date of dispatch of the first examination
                            report: 19990713
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS A
               (English)
                           9907
                                       298
                (English)
                           9907
                                    126715
      SPEC A
Total word count - document A
                                    127013
Total word count - document B
                                          0
Total word count - documents A + B 127013
...INTERNATIONAL PATENT CLASS: G06F-013/00 ...
```

24/5,K/3

... G06F-009/38

(Item 3 from file: 348)

...SPECIFICATION each region. Region decoding time estimates are made to optimize compression thresholds. Region descriptive codes conveying the size and locations of the regions are grouped together in a first segment of a data stream. Region...

...display.

United States Patent No. 4,922,341 discloses a method for scene-model-assisted reduction of **image** data for digital television signals, whereby a picture signal supplied at time is to be coded, whereby a predecessor frame from a scene already coded at time t-1 is present in an **image** store as a reference, and whereby the frame-to-frame information is composed of an amplification factor...

...gray scale value or picture half-tone expressed as a defined luminance value is written into the image store of a coder at the transmitter and in the image store of a decoder at the receiver store, in the same way for all picture elements (pixels). Both the image store in the coder as well as the image store in the decoder are each operated with feed back to themselves in a manner such that the content of the image store in the coder and decoder can be read out in blocks of variable size, can be amplified with a factor greater than or less than 1 of the luminance and can be written back into the image store with shifted addresses, whereby the blocks of variable size are organized according to a known quad tree data structure.

United States Patent No. 5,122,875...

...and low priority codeword sequences correspond to compressed video data of relatively greater and lesser importance to image reproduction respectively. A transport processor, responsive to the high and low priority codeword sequences, forms high and...

...for transmission.

United States Patent No. 5,146,325 discloses a video decompression system for decompressing compressed **image** data wherein odd and even fields of the video signal are independently compressed in sequences of intraframe...

...and substituting the opposite field of data for unavailable data may be used to advantage to reduce image display latency during system start-up and channel changes.

United States Patent No. 5,168,356 discloses...transport blocks.

United States Patent No. 5,168,375 discloses a method for processing a field of image data samples to provide for one or more of the functions of decimation, interpolation, and sharpening. This...

...the number of frequency terms is reduced, this being followed by inverse transformation to produce a reduced— size matrix of sample points representing the original block of data. In the case of interpolation, additional frequency...

...matrix.

United States Patent No. 5,175,617 discloses a system and method for transmitting logmap video images through telephone line band-limited analog channels. The pixel organization in the logmap image is designed to match the sensor geometry of the human eye with a greater concentration of pixels...

...detected. An experimental video telephone transmitted 4 frames per second, applied quadrature coding to 1440 pixel logmap images and obtained an effective data transfer rate in excess of 40,000 bits per second.

United States...

...with twice the number of entry points into the signal for decoding without increasing the amount of data transmitted.

United States Patent No. 5,212,742 discloses an apparatus and method for processing video data...

...processor and to the compute modules with a second bus. The method

handles assigning portions of the image for each of the processors to operate upon.

United States Patent No. 5,231,484 discloses a...

- ...334 discloses a method of removing frame redundancy in a computer system for a sequence of moving images . The method comprises detecting a first scene change in the sequence of moving images and generating a first keyframe containing complete scene information for a first image . The first keyframe is known, in a preferred embodiment, as a "forward-facing" keyframe or intraframe, and...
- ...one intermediate compressed frame, the at least one intermediate compressed frame containing difference information from the first image for at least one image following the first image in time in the sequence of moving images . This at least one frame being known as an interframe. Finally, detecting a second scene change in the sequence of moving images and generating a second keyframe containing complete scene information for an image displayed at the time ...for reverse play. The intraframe may also be used for generation of complete scene information when the images are played in the forward direction. When this sequence is played in reverse, the backward-facing keyframe... ...Patent No. 5,276,513 discloses a first circuit apparatus, comprising a given number of prior-art image -pyramid stages, together with a second circuit apparatus, comprising the same given number of novel motion-vector...
- ...employing minimum hardware structure. Specifically, the first and second circuit apparatus, in response to relatively high-resolution image data from an ongoing input series of successive given pixel-density image -data frames that occur at a relatively high frame rate (e.g., 30 frames per second), derives... . ..

. .

...data frames that occur at the same given frame rate. Each vector-data frame is indicative of image motion occurring between each pair of successive image frames.

United States Patent No. 5,283,646 discloses a method and apparatus for enabling a real-time video encoding system to accurately deliver the desired number of bits per frame, while coding the image only once, updates the quantization step size used to quantize coefficients which describe, for example, an image to be transmitted over a communications channel. The data is divided into sectors, each sector including a...

...number of sectors associated with the particular group of data. The system then readjusts the quantization step size to target a final desired number of data bits for a plurality of sectors, for example describing an image . Various methods are described for updating the quantization step size and determining desired bit allocations.

The article, Chong, Yong M., A Data-Flow Architecture for Digital Image Processing, Wescon Technical Papers: No. 2 Oct./Nov. 1984, discloses a real-time signal processing system specifically designed for image processing. More particularly, a token based data-flow architecture is disclosed wherein the tokens are of a...depredictor bits to produce the final actual video.

United States Patent No. 5,060,242 discloses an image signal processing system DPCM encodes the signal, then Huffman and run length encodes the signal to produce...

...DCPM decoder.

United States Patent No. 5,168,375 discloses a method for processing a field of image data samples to provide for one or more of the functions of decimation, interpolation, and sharpening is...

...the number of frequency terms is reduced, this being followed by inverse transformation to produce a reduced- size matrix of sample points representing the original block of data. In the case of interpolation, additional frequency...

- ...priority and low priority components of the coded Data are applied to the high and low priority data packers, respectively. The Low Priority Length word is zeroed when high Priority Data is to be packed...
- ...United States Patent No. 5,124,790 to Nakayama discloses a reverse quantizer to be used with image memory. The inverse quantizer is used in the standard way to decode differential predictive coding method (DPCM ...available data rate that is achieved. Buffer overflow and underflow is avoided by adapting the quantization step size the quantizer 152 and the de-quantizer 156 by means of a quantizational level which is recalculated...
- ...a function of the amount of already encoded data for the frame, compared with the total buffer size . In this manner, the quantization level can advantageously be recalculated by the decoder and does not have to be transmitted.

United States Patent No. 5,142,380 to Sakagami et al. discloses an image compression apparatus suitable for use with still images such as those formed by electronic still cameras using solid state image sensors. The quantizer employed is connected to a memory means from which threshold values of a quantization...

- ...United States Patent No. 5,193,002 to Guichard et al. disclosed an apparatus for coding/decoding image signals in real time in conjunction with the CCITT standard H.261. A digital signal processor carries...
- ...a data buffering means immediately following the system, whereby time spread for video pictures of varying data size can be controlled. Also in accordance with the invention, a processing stage receives the input data stream...
- ... of a picture, and for clearing the pipeline.

The improved pipeline system may also include a fixed size, fixed width buffer, and means for padding the buffer to pass an arbitrary number of bits through...response to recognition of selected tokens. The tokens in the pipeline are dynamically adaptive and may be position dependent upon the processing stages for performance of functions or position independent of the processing stages for performance of functions.

In a pipeline machine, in accordance with the...

...with non-adjacent processing stages, and the tokens may reconfigure the processing stages. Such tokens may be **position** dependent for some functions and **position** independent for other functions in the pipeline.

In an improved pipeline machine, in accordance with the invention...

The Start Code Detector stage is adapted to **search** an **input** data stream in a search mode for a selected start code. The detector searches for breaks in...a data buffering means immediately following the system, whereby time spread for video pictures of varying data **size** can be controlled.

The system may include a spatial decoder having a two-wire interface intercon-necting...

... END token and a FLUSH token.

The present invention also provides, in a pipeline machine, a fixed size , fixed width buffer and means for padding the buffer to pass an arbitrary number of bits through...

...may be performed only on the last word of a token and padding insures uniformity of word <code>size</code> . In accordance with the invention, a reconfigurable processing stage may be provided as a spatial decoder and ...MOTION VECTOR: A two-dimensional vector used for motion compensation that provides an offset from the coordinate <code>position</code> in the current picture to the coordinates in a reference picture.

the second of the second of the second

...and from macroblocks and pictures occurring at other times. PEL: Picture element.

PICTURE: Source, coded or reconstructed image data. A source or reconstructed picture consists of three rectangular matrices of 8-bit numbers representing the...

- ...many different types of data are processed in the pipeline. This encoding accommodates data packets of variable **size** and the **size** of the packet need not be known in advance.
 - 4. The overhead associated with describing the type...data and control signals from any form of preceding device. For example, reception circuitry of a digital image transmission system, another pipeline, or the like. On the other hand, it may generate itself, all or...not be performed unless the first data word of the token has a "1" in the third position of the word and "0's" in the five high-order bits. (Of course, the required pattern...
- ...the various internal and external control signals, and the manner in which data is clocked between the input and output sides of the stage and is duplicated.

Referring now more particularly to Figure 10, there...

- ...line 57 as a first input to a DRAM interface 58. The DRAM interface 58 also receives input from a buffer manager 59 over line 60. Signals are transmitted to and received from external DRAM...a data stream 151. The decoder receives this data stream 151. The decoder can then reconstruct the image according to the format used to encode it. In order to allow the decoder to recognize start...of the four luminance blocks 213 and two chrominance blocks 214 is 8 x 8 pixels in size. The four luminance blocks 213 contain a 1 pixel to 1 pixel mapping of the luminance (Y...
- ...the structure and function of the Start Code Detector will become apparent. A value register 221 receives image data over a line 222. The line 222 is eight bits wide, allowing for parallel transmission of...
- ...of twenty-four bits at a time. The detector 225 detects the presence or absence of an image which corresponds to a standard-independent start code of 23 "zero" values followed by a single "one" value. An 8-bit data value image follows a valid start code image. On detecting the presence of a start code image, the detector 225 transmits a start image over a line 227 to a value decoder 228.

A second output from the decode register 224...

- ...a value decode shift register 230. The value decode shift register 230 can hold a data value image fifteen bits long. The 8-bit data value following the start code image is shifted to the right of the value decode shift register 230, as indicated by area 231. This process eliminates overlapping start code images, as discussed below. A first output from the value decode shift register 230 is passed to the...
- ...allowing for parallel transmission of fifteen bits at a time. The value decoder 228 decodes the value image using a first look-up table (not shown). A second output from the value decode shift register...
- ...the index-to-tokens converter 234 over a line 236. The information is either the data value **image** or start code index **image** obtained from the first look-up table. The flag indicates which form of information is passed. The...
- ...other lengths may also be used. The index-to-tokens converter 234 converts the information to token images using a second look-up table (not shown) similar to that given in Table 12-3 of the Users Manual. The token images generated by the index-to-tokens converter 234 are then output over a line 237. The line...
- ...242 is input to a Start Code Detector (not shown in Figure 21). A first

start code image 243 is detected by the Start Code Detector. The Start Code Detector then receives a first data value image 244. Before processing the first data value image 244, the Start Code Detector may detect a second start code image 245, which overlaps the first data value image 244 at a length 246. If this occurs, the Start Code Detector does not process the first data value image 244, and instead receives and processes a second data value image 247.

...also receives a flag as a second input over a line 253, and receives an input valid image over a first two-wire interface 254. A first output from the flag generator 251 is passed...

- ...line 256 to a decode index 257. The decode index 257 generates four outputs; a picture start image is passed over a line 258, a picture number image is passed over a line 259, an insert image is passed over a line 260, and a replace image is passed over a line 261. The data from the flag generator 251 is passed over a line 262a. A header generator 263 uses a look-up table to generate a replace image, which is passed over a line 262b. An extra word generator 264 uses the MPU to generate an insert image, which is passed over a line 262c. Line 262a, and line 262b combine to form a line...
- ...for parallel transmission of fifteen bits at a time.

 The input valid register (not shown) passes an **image** as a first input to a first OR gate 267 over a line 268. An insert **image** is passed over a line 269 as a second input to the first OR gate 267. The...
- ...input to a first AND gate 270 over a line 271. The logical negation of a remove image is passed over a line 272 as a second input to the first AND gate 270 is...
- ...to the output latches 265 over a line 273. The output latches 265 pass an output valid image over a second two-wire interface 274. An output accept image is received over the second two-wire interface 274 by an output accept latch 275. The output...
- ...output accept register (not shown) over a line 276.

 The output accept register (not shown) passes an image as a first input to a second OR gate 277 over a line 278. The logical negation...
 ...passed as a second input to the second OR gate 277 over a line 279. The remove image is passed over a line 280 as a third input to the second OR gate 277. The...
- ...input to a second AND gate 281 over a line 282. The logical negation of an insert image is passed as a second input to the second AND gate 281 over a line 283. The...
- ...absence or presence of standard signals in the certain machine independent control tokens, the detection of an image by the start Code Detector 51 generates a sequence of machine independent Control Tokens. Each image listed in the "Image Received" column starts the generation of all machine independent control tokens listed in the group in the "Tokens Generated" column. Therefore, as shown in line 1 of Table 600, whenever a "sequence start" image is received during H.261 processing or a "picture start" image is received during MPEG processing, the entire group of four control tokens is generated, each followed by...
- ... Table 600, the second group of four control tokens is generated at the proper time irrespective of images received by the Start Code Detector 51.

As shown in line 1 of Table 601 which shows...the RAM is exactly the same as if this had been an MPEG picture of the same <code>size</code>. Hence, all of the address generation circuitry for reading from the DRAM, for instance, when forming predictions...the output of the Spatial Decoder. A second sequence of pictures may have a totally different picture <code>size</code> and, hence, have a different length when compared to the first length. Again, all such second sequence...

- ...to JPEG decoding, a single Spatial Decoder with no off chip DRAM can rapidly decode baseline JPEG images. The Spatial Decoder supports all features of baseline JPEG encoding standards. However, the image size that can be decoded may be limited by the size of the output buffer provided. The Spatial Decoder circuit also includes a random access memory circuit, having...
- ...In addition, off chip DRAMs are used for decoding JPEG-encoded video pictures in real time. The **size** and speed of the buffers used with the DRAMs will depend on the video encoded data rates....
- ...picture of spatially decoded information packet of spatially decoded picture information, temporally displaced relative to the temporal position of the first picture.

In multi-standard circuits capable of decoding MPEG-encoded signals, larger logic DRAM...similar way, the MPEG sequence(underscore)start(underscore)code and the JPEG SOI (start(underscore)of(underscore) image) marker both generate a machine sequence(underscore)start(underscore)token. The H.261 standard, however, has no...

...picture(underscore)start(underscore)code, will generate a sequence(underscore)start token.

None of the above described <code>images</code> are directly used other than in the SCD. Rather, a machine PICTURE(underscore)START token, for example, has been deemed to be equivalent to the PICTURE(underscore)START <code>images</code> contained in the bit stream. Furthermore, it must be borne in mind that the machine PICTURE(underscore)START by itself, is not a direct <code>image</code> of the PICTURE(underscore)START in the standard. Rather, it is a control token which is used in combination with other control tokens to provide standard-independent decoding which emulates the operation of the <code>images</code> in each of the compression coding standards. The combination of control tokens in combination with the reconfiguration...

...described subsequently.

Referring again to Table 600, there are shown the names of a group of standard images in the left column. In the right column there are shown the machine dependent control tokens used in the emulation of the standard encoded signal which is present or not used in the standard image.

With reference to Table 600, it can be seen that a machine sequence(underscore) start signal is...described, one of the compression standards, such as H.261, does not have a sequence(underscore) start image in its data stream, nor does it have a PICTURE(underscore) END image in its data stream. The Start Code Detector indicates the PICTURE(underscore) END point in the incoming...

...removes the padding. Thus, an arbitrary number of bits can be passed through a buffer of fixed size and width.

In one embodiment, a slice (underscore) start control token is used to identify a slice...

- ...picture. A slice(underscore)start control token is employed to segment the picture into smaller regions. The **size** of the region is chosen by the encoder, and the Start Code Detector identifies this unique pattern ...
- ...located downstream from the Start Code Detector, to segment the picture being received into smaller regions. The **size** of the region is chosen by the encoder, recognized by the Start Code Detector and used by...
- ...streams contain standard dependent, non-data, identifiable bit patterns, one of which is hereinafter called a start image and/or standard-dependent code. A similar function is served in JPEG, by marker codes. These start...Start Code Detector.

Each of the standard compression encoding systems employs a unique

start code configuration or image which has been selected to identify that particular compression specification. Each of the start codes also carries...

...the standards, as well as other standard words as opposed to data words, are sometimes identified as **images** to avoid confusion with the use of code and/or machine-dependent codes to refer to the...

... noun) are in lower case.

The standard-dependent coded input picture input stream comprises data and start images of varying lengths. The start images carry with them a value telling the user what operation is to be performed on the data...

...which are compatible not only with the values contained in the values of the encoded signal standard image, but which are also capable of controlling the various stages to emulate the operation of the standard ...which in response to a recognized token, reconfigures itself to perform various operations.

Tokens may be either **position** dependent or **position** independent upon the processing stages for performance of various functions. Tokens may also be metamorphic in that...

...stages and in this regard may interact with adjacent and/or non-adjacent stages. Tokens may be **position** dependent for some functions and **position** independent for other functions, and the specific interaction with a stage may be conditioned by the previous...

... Furthermore, padding a token is a way of passing an arbitrary number of bits through a fixed size , fixed width buffer.

The present invention is directed to a pipeline processing system which has a variable...in length because they contain the difference signals comparing the first word with reference to the second **position** on the scan information field.

The words are interspersed with each other, as required by the standard ...8, 16 or 32 bits wide. Accordingly, the amount of DRAM used can be matched to the **size** and bandwidth requirements of the particular application.

In this example (which is exactly how the DRAM interface...

...receive prediction data. These buffers are more interesting.

In general, prediction data will be offset from the **position** of the block being processed as specified in the motion vectors in x and y.

Thus, the...

...stop" technology, and this is described below.

Consider block A in Figure 26. Reading must start at **position** (1,1) and end at **position** (7,7). Assume for the moment that one byte is being read at a time (i.e...or marker used in any one of the compression standards. It will be appreciated, however, that, other **images** from other data bitstreams can be used for this purpose. Accordingly, these **images** can be used throughout this present invention to change it to another embodiment which is capable of...

...interruption.

When any of the search modes are set, the Start Code Detector looks for incoming start images which are suitable for creating the machine independent tokens. All data coming into the Start Code Detector prior to the identification of standard-dependent start images is discarded as meaningless and the machine stands in an idling condition as it waits this information...

...of pictures or higher start codes. This pattern causes the Start Code Detector to discard all its input and look for the group(underscore)start standard image. When such an image is identified, the Start Code Detector generates a GROUP(underscore)START token and the search mode is...into frequency information.

The IDCT operates on a portion of the picture which is 8x8 pixels in

- size . The math which performed on this data is largely governed by the particular standard used to encode...
- ...of the IDCT checks the entering data to ensure that the DATA tokens are of the correct size for processing. In fact, the token stream can be corrected in some situations if the error is...formatted data output by the decoder chip and write it into memory in a raster order.

The Image Formatter is a single chip VLSI device providing a wide range of output formatting functions.

A.2...

...still picture decoding

A single Spatial Decoder, with no-off-chip DRAM, can rapidly decode baseline JPEG images. The Spatial Decoder will support all features of baseline JPEG. However, the image size that can be decoded may be limited by the size of the output buffer provided by the user. The characteristics of the output formatter may limit the...

...DRAMs to the Spatial Decoder allows it to decode JPEG encoded video pictures in real-time. The size and speed of the required buffers will depend on the video and coded data rates. The Temporal...Token varies depending on where the DATA Token is within the system, i.e., the data is position dependent. In this regard, the data may be either frequency domain or Pel domain data depending on...the decoder clock. See Section A.10.5, "Coded data clock". Similarly the display interface of the Image Formatter can operate from a clock that is asynchronous to the main decoder clock.)

1))

All chips...The condition mask register is one bit read/write register which enables the generation of an interrupt request if the corresponding condition event register(s) is (are) set. If the condition event is already set...used. On each chip, the microprocessor interface (MPI) operates asynchronously to the chip clocks. In addition, the Image Formatter can generate a low frequency audio clock which is synchronous to the decoded video's picture...Temporal Decoder, there are 9 user instructions, including three JTAG mandatory instructions. The extra instructions allow a degree of internal device testing to be performed, and provide additional external test flexibility. For example, all device ...coded(underscore)extn is ignored. The bytes are subsequently assembled on-chip into DATA Tokens until the input mode is changed.

1) First word ("Head") of Token supplied in token mode.

2) Last word of...system only allows access to "blocks" of data. This block structure might be derived from the sector size of a disc or a block error correction system. So, the position of entry and exit points in the coded video data may not be related to the filing system block structure.

The stop(underscore)after(underscore)picture and discard(underscore)all(underscore) data mechanisms allow unwanted data from the old video sequence to be discarded. Inserting a FLUSH Token after...this include:

- . start-up of a decoder after jumping into a coded data file at an unknown position (e.g., random accessing).
- . to seek to a known point in the data to assist recovery after...
- ...A.11.6 shows the MPEG start codes searched, for different configurations of start(underscore) code(underscore) search. The equivalent H.261 and JPEG start/marker codes can be seen in Table A.11.4...processing stages "up steam" of the buffer will halt until the Spatial Decoder is unable to accept data on its input port. Similarly, if a buffer empties, then the circuits trying to remove data from the buffer will halt until data is available.

As described in A.13.2, the **position** and **size** of the coded data and Token buffer are specified by the buffer base and length registers. The ...

- ...the coded video data and instructs the other units. The Huffman decoder converts variable length coded (VLC) data into integers. The Macroblock counter keeps track of which section of a picture is being decoded. The ...
- ...data. For example, the horiz(underscore)pels register corresponds to the MPEG sequence header information, horizontal(underscore) size, and the JPEG frame header parameter, X. These registers are loaded by the Video Demux when the...
- ...associated with a Token. For example, the register, horiz(underscore)pels, is associated with Token, HORIZONTAL(underscore) SIZE. The Token is generated by the Video Demux when (or soon after) the coded data is decoded...

and the second second second second

. .

0

24/5,K/4 (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00961586

Image processing method and control method therefor Bildverarbeitungsgerat und Kontrollverfahren dafur Appareil de traitement d'images et son procedede reglage PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo, (JP), (applicant designated states: DE;FR;GB;IT) INVENTOR:

Shiiyama, Hirotaka, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick Court High Holborn, London WClR 5DJ, (GB)

PATENT (CC, No, Kind, Date): EP 872803 Al 981021 (Basic)

APPLICATION (CC; No, Date): EP 98302888 980409;

PRIORITY (CC, No, Date): JP 9583997 970414; JP 9584097 970414; JP 9734597 970415

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06F-017/30

CITED PATENTS (EP A): XP 564740 0; JP 1070874 A; XP 522613 0

CITED REFERENCES (EP A):

FALOUTSOS C ET AL: "EFFICIENT AND EFFECTIVE QUERYING BY IMAGE CONTENT" JOURNAL OF INTELLIGENT INFORMATION SYSTEMS: ARTIFICIAL INTELLIGENCE AND DATABASE TECHNOLOGIES, vol. 3, no. 3/04, 1 July 1994, pages 231-262, XP000564740

PATENT ABSTRACTS OF JAPAN vol. 013, no. 284 (P-892), 29 June 1989 & JP 01 070874 A (HITACHI LTD;OTHERS: 01), 16 March 1989,

LEE D ET AL: "QUERY BY IMAGE CONTENT USING MULTIPLE OBJECTS AND MULTIPLE FEATURES: USER INTERFACE ISSUES" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON IMAGE PROCESSING (IC, AUSTIN, NOV. 13 - 16, 1994, vol. VOL. 2, no. CONF. 1, 13 November 1994, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 76-80, XP000522613;

ABSTRACT EP 872803 A1

A retrieval condition for retrieving desired image data is input from a user interface, and the input retrieval condition is analyzed by a text processing unit. On the basis of the analysis result, a retrieval result notification unit outputs a question to prompt the user to input a retrieval condition different from the previously input retrieval condition. A retrieval condition is input from the user interface in accordance with the output question. A retrieval unit retrieves image data on the basis of the input retrieval condition.

ABSTRACT WORD COUNT: 87

LEGAL STATUS (Type, Pub Date, Kind, Text):
Examination: 010613 Al Date of dispatch of the first examination report: 20010430

Application: 981021 A1 Published application (Alwith Search Report

;A2without Search Report)

Examination: 990506 Al Date of filing of request for examination:

990304

• ..

Change: 990630 Al Designated Contracting States (change)

LANGUAGE (Publication, Procedural, Application): English; English

FULLTEXT AVAILABILITY:

. . .

Available Text Language Update Word Count

CLAIMS A (English) 9843 4665

SPEC A (English) 9843 10782

Total word count - document A 15447
Total word count - document B 0

Total word count - document B U
Total word count - documents A + B 15447

INTERNATIONAL PATENT CLASS: G06F-017/30

...SPECIFICATION on the basis of the image feature amount of the image data by looking up the image feature amount index; and

display means for displaying image data corresponding to the retrieval condition on the basis of the image data acquired by the acquisition means and image data retrieved by the second retrieval means.

Preferably, the apparatus further comprises third storage means for storing a synonym...

...the basis of an image feature amount of the representative image data by looking up the image feature amount index.

Preferably, the display means displays the image data corresponding to the retrieval condition as thumbnail images.

Also, when one of the thumbnail images displayed by the display means is...on the basis of the image feature amount of the image data by looking up the image feature amount index; and

the display step of displaying image data corresponding to the retrieval condition on the basis of the image data acquired in the acquisition step and image data retrieved in the second retrieval step.

In order to achieve the above object, according to still another aspect

...on the basis of an image feature amount of the image data by looking up the image feature amount index; and

display means for displaying image data corresponding to the retrieval condition on the basis of the image data retrieved by the first retrieval means and image data retrieved by the second retrieval means.

Preferably, the apparatus further comprises third storage means for storing a synonym...

...and that of the image data retrieved by the first retrieval means by looking up the image **feature amount** index.

Preferably, the display means displays the image data corresponding to the retrieval condition as thumbnail images.

In addition, when one of the thumbnail images displayed by the display means.

...on the basis of the image feature amount of the image data by looking up the image feature amount index; and

the display step of displaying image data corresponding to the retrieval condition on the basis of the image data retrieved in the first retrieval step and image data retrieved in the second retrieval step.

In order to achieve the above object, according to still another aspect ...on the basis of the image feature amount of the image data by looking up the image feature amount index. The "display module" displays image data corresponding to the retrieval condition on the basis of the acquired image data and retrieved image data.

When the third embodiment of the present invention is applied to the

storage medium, program codes corresponding...

...on the basis of the image feature amount of the image data by looking up the image feature amount index. The "display module" displays image data corresponding to the retrieval condition on the basis of the retrieved image data and image data retrieved by the second retrieval means.

As many apparently widely different embodiments of the present invention can be...

- ...CLAIMS on the basis of the image feature amount of the image data by looking up the image feature amount index; and
 - display means for displaying image data corresponding to the
 retrieval condition on the basis of the image data acquired by said
 acquisition means and image data retrieved by said second
 retrieval means.
 - 23. The apparatus according to claim 22, further comprising third storage means...on the basis of the image feature amount of the image data by looking up the image feature amount index; and
 - the display step of displaying image data corresponding to the retrieval condition on the basis of the image data acquired in the acquisition step and image data retrieved in the second retrieval step.
 - 34. The method according to claim 33, further comprising the third storage...on the basis of an image feature amount of the image data by looking up the image feature amount index; and
 - by looking up the image feature amount index; and display means for displaying image data corresponding to the retrieval condition on the basis of the image data retrieved by said first retrieval means and image data retrieved by the second retrieval means.
 - 46. The apparatus according to claim 45, further comprising third storage means...
- ...on the basis of the image feature amount of the image data by looking up the image feature amount index; and
 - the display step of displaying image data corresponding to the retrieval condition on the basis of the image data retrieved in the first retrieval step and image data retrieved in the second retrieval step.
 - 59. The method according to claim 58, further comprising the third storage...

24/5,K/5 (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00711605

Reconfigurable data processing stage Rekonfigurierbare Datenverarbeitingsstufe Etage d'operation de donnees reconfigurable PATENT ASSIGNEE:

DISCOVISION ASSOCIATES, (260173), 2355 Main Street Suite 200, Irvine, CA 92714, (US), (Proprietor designated states: all)
INVENTOR:

Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol, BS16 1NA, (GB)

Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley, Gloucestershire, GL11 6BD, (GB)

Robbins, William Philip, 1/9 Springhill, Cam, Gloucestershire, GL11 5PE, (GB)

LEGAL REPRESENTATIVE:

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20, rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 674446 A2 950927 (Basic)

EP 674446 A3 960814 EP 674446 B1 010801 wherein said unit is **position** independent of said processing stages for performance of functions.

66. A machine as recited in either claim...to reconfigure.

73. A machine as recited in either claim 61 or 62,

wherein said unit is **position** dependent for some functions and **position** independent for other functions.

74. A machine as recited in either claim 61 or 62, wherein said...

...CLAIMS A system as recited in any of claims 2, 4, 5 or 7,

wherein said token is **position** dependent upon said processing stages for performance of functions.

9. A system as recited in any of claims 2-3, 6 or 7,

wherein said token is **position** independent of said processing stages for performance of functions.

10. A system as recited in any of...

... A system as recited in any of claims 2, 4, 5 or 7,

wherein said token is **position** dependent for some functions and **position** independent for other functions.

18. A system as recited in any of claims 2-6,

wherein said ...

24/5,K/16 (Item 11 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2004 WIPO/Univentio. All rts. reserv.

00784125

SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR PIECEMEAL RETRIEVAL IN AN INFORMATION SERVICES PATTERNS ENVIRONMENT

SYSTEME, PROCEDE ET ARTICLE DE FABRICATION DESTINES A LA RECHERCHE FRAGMENTAIRE DANS UN ENVIRONNEMENT DE MODELES DE SERVICES D'INFORMATIONS

Patent Applicant/Assignee:

ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

Inventor(s):

BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 , US,

Legal Representative:

HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 38th Floor, 2029 Century Park East, Los Angeles, CA 90067-3024, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200116705 A2-A3 20010308 (WO 0116705)

Application: WO 2000US24085 20000831 (PCT/WO US0024085)

Priority Application: US 99386433 19990831

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-009/44

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 150355

English Abstract

A system, method and article of manufacture are provided for providing a warning upon retrieval of objects that are incomplete. An object is provided with at least one missing attribute. Upon receipt of a request from an application for the object access to the attributes of the object is allowed by the application. A warning is provided upon an attempt to access the attribute of the object that is missing.

French Abstract

L'invention concerne un systeme, un procede et un article de fabrication concus pour emettre un avertissement lors de l'extraction d'objets qui sont incomplets. L'objet fourni presente au moins un attribut manquant. Des la reception d'une requete d'une application pour l'objet, ladite application autorise l'acces aux attributs de cet objet. Un avertissement est emis lorsque l'on tente d'acceder a l'attribut manquant de l'objet.

Legal Status (Type, Date, Text)

Publication 20010308 A2 Without international search report and to be republished upon receipt of that report.

Examination 20011018 Request for preliminary examination prior to end of 19th month from priority date

Search Rpt 20011122 Late publication of international search report Republication 20011122 A3 With international search report.

Main International Patent Class: G06F-009/44 Fulltext Availability:

Detailed Description

Detailed Description

SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR PIECEMEAL RETRIEVAL IN AN INFORMATION SERVICES PATTERNS ENVIRONMENT FIELD OF THE INVENTION

The **present** invention relates to software patterns and more particularly to piecemeal **retrieval** in an **information** services patterns environment.

BACKGROUND OF THE INVENTION

An important use of computers is the transfer of information... components;

Figure 37 shows how a Billing Business Component may create an invoice; Figure 38 illustrates the **relationship** between the spectrum of Business Components and the

types of Partitioned Business Components;

Figure 39 illustrates the...of the present invention;

Figure 175 illustrates an Entity-Based Data Access System;

Figure 176 illustrates a Retrieving Data Piecemeal System;

Figure 177 illustrates a Commit and Rollback routine;

Figure 178 illustrates Nested Logical Units of...or it may be a graphical field such as a check box, a list box or an image . Form Services provide support for.

Display - support the display of various data types (e.g., text, numeric \dots

...and user actions.

For example, the Field Interaction Manager may disable the "OK" button until all required input

fields contain valid data. These services significantly reduce the application logic complexity inherent to an interactive...of the tool? Is the tool scalable?

The tool should be scalable to support growth in application size , users, and developers.

Exemplary products that may be used to implement this component include JetFon-ns...These tags can be used to control the positioning and

formatting of a document's text and images. SGML is used for large, complex, and highlystructured documents that are subject to frequent revisions, such as...

...with previous ones. Basic features supported by HTML include headings, lists, paragraphs, tables, electronic forms, in-line images (images next to text), and hypertext links. Enhancements to the original HTML 1.0 specification include banners, the applet tag to support Java, image maps, and text flow around images.

The WX also approved the specification for version 4.0 of HTML (http://www.w3.org/TR...a specification called the Document Object 78

Model DOM The DOM categorizes Web page elements--including text, images
, and links--as objects and specifies the attributes that are associated with each object. The DOM makes...

...and animated objects and supports hyperlinks to multimedia formats such as audio clips, video files, and graphical images. As users maneuver through VRML worlds, the landscape shifts to match their movements and give the impression...text-based documents that included headings, bulleted lists, and hyperlinks to dynamic pages that support rich graphic images and virtual reality. So what next for the Web? The answer resides in a Synchronized Multimedia Integration...

...types together. The language enables Web authors to sort multimedia content into separate audio, video, text, and image files and streams which are sent to a user's browser. The SMIL tags then specify the... icons.

The HTML standard and popular browsers provide hyperlinking services for non-text items such as graphics.

Image MM is also similar to the hypertext menu above, but selections are represented as a series of pictures. A further evolution of the image map menu is to display an image depicting some place or thing (e.g., a picture of a bank branch with tellers and loan ...business applications.

Virtual Reality - A virtual reality or a virtual environment interface takes the idea of an **image** map to the next level by creating a 3-dimensional (3-D) environment for the user to...

...applications, this can create a more user-friendly interface, enabling the user to find information faster.

An image map menu can be useful where all users share some visual model
for how business is conducted...

...be very engaging, but also painfully slow if even a moderate speed communications connection is required. Additional **Image** Map Services are required to map the location of user mouse clicks within the **image** to the corresponding page or window which is to belaunched.

88
Exemplary products that may be used...

...and on-screen previewing of paper or photographic documents which contain screen data, application data, graphics or images

Implementation considerations

Printing services must take into consideration varying print scenarios common in Netcentric environments, including: varying...

...Architects must additionally be sure to evaluate that controls will support all required environments, are small in **size** and extensible as requirements demand.

How important is performance?

In general, performance of data access and...RDBMS market, Oracle is available for a wide variety of hardware platfonris including MPP machines. Oracles market position and breadth of platform support has made it the RDBMS of choice for variety of financial, accounting... locally and users do not have to remotely access the master database. This is especially true for image and document data which cannot be quickly accessed from a central site. Making automatic copies of a...is defined as a collection of objects potentially of different types (e.g., structured data, unstructured data, images, multimedia) a business user deals with. An individual document might be a table created using a spreadsheet...shared printers. The administration of Print Services is usually handled by a print server. Depending on the size of the network and the amount of resources the server must manage, the print server may run...continue to process other tasks while waiting for a response to a request.

What's the clients **position** on DCE? DCE software, developed by Open Systems Foundation (OSF), is licensed to OSF-member companies to...

...files across the network. FTP also provides a mechanism to obtain filename, directory name, attributes and file size information. Remote file access protocols, such as Network File System (NFS) also use a block transfer method...all BEA MessageQ clients and servers Interoperability with IBM MVS/CICS and IBM MVS/IMS Large message size -up to 4 MB-eliminates need for message partitioning Momentum's XIPC

XIPC is an advanced software...has gained acceptance as the Internet mechanism for sending E-mail containing various multimedia parts, such as images, audio files, and movies. S/MIME, or secure MIME adds encryption and enables a secure mechanism for...type of network is available (LAN, type of LAN, WAN, type of WAN, dial-up, wireless, etc.), size of messages and number of messages that go across the network.

153
Possible Product Options
Expersoft's...functionality."

Fragmentation/Reassembly - The Packet Forwarding/Internetworking service divides an application message into multiple packets of a **size** suitable for network transmission.

The individual packets include information to allow the receiving node to reassemble them...as part of the initial connection set up and as network conditions change. Because of the small <code>size</code> of ATM data cells, QoS can be better managed, compared to protocols such as Ethernet that have... messages to be sent/received

Automatic error logging for Tuxedo components (ULOG, tagent log)
Application code can write to the LTLOG with a Tuxedo API (error logging provided) Automatic process monitor for process that die...tier architecture - client, application server, or database. The decision will need to be based upon codes table size and number, information update frequency, and write-access to the client machine or device.

Active Help 2728...support for delivering applications to a wide variety of users over the Internet, intranet, and extranet. The information about these services in the Netcentric framework may be limited based on the least common denominator. For...

...if the page is available in the cache. If the page is available, then the Web server retrieves it from the cache, otherwise it retrieves it from the network. Clearly, the Web server can retrieve...g., a stock ticker). Asynchronous push/pull services do not require that a session-like connection be present between the subscriber and the

information.

Internet ListServers are a simple example. Subscribers use e-mail to...
...content within an organization or across the Internet, ensuring subscribers always have the most up-to-date information automatically.

PointCast - news network that appears instantly on the subscribers computer screen.

Batch Services (B2060) Batch processing...

...the manual element can be completely separated from a batch element.

The volume of information to be **presented** to a user is too great to be processed on-line or it can be better printed...continue. If any errors are identified, the report initiation function will return an error message to the **requester** application.

Initiate report execution. The initiate report execution function processes the report profile and specific distribution requirements...

... report information.

Collect the information. This ftinction is responsible for collecting the information (for example, data, text, image, graphics) that is required for the report. This function would utilize the Information Access Services component of...

...a program in C for each report format. Here, many aspects of report printing -- such as page size, headings, footings, and printer control values -- would have to be programmed in function calls to facilitate the

...report. Specific destinations can include: printer(s), user(s), user groups, archives (permanent storage), and/or specific display devices such as Several additional options exist for distributing reports including timed reporting, multiple copy distribution, and report records are removed from the table only after the output reports have been archived. Implementation and frequency of this table cleanup is to be determined in systems...

...print a report proceeds as follows.

The report status is retrieved from the report status table.

The **output** file is located on disk and sent to the specified or default printer or the request is...

...All reports are written to a reserved area on disk; however, specification of a printer causes the **output** to be printed as well as stored on the file system.

Get Report Status. The Get Report...for Business Processing Re-engineering tools.

How stable is the vendor?

One should consider the leadership and size characteristics of the products vendor compared to the workflow software marketplace. Another consideration is whether the vendor...were alive. This means that Business Components should reflect directly the characteristics and abilities (i.e., the information and behavior) of the business concepts they represent. Therefore, only by examining the various types of business.

...that needs to be done. Not only do they 259

encapsulate behaviors and rules, but also the information that is associated with those processes. Examples include: Pricing, Credit Check, Billing, and Fraud Analysis. A Pricing...it be COM, JavaBeans, or CORBA? It's still not clear. Likewise with languages: Will it be Visual Basic, Java? Tools and repositories offer another challenge. Clear winners have yet to emerge, and newcomers

...requires a change in the way one thinks about 267 designing and building applications. Engagement experience has shown that it takes a couple of months to feel comfortable with this paradigm-and longer for those...

...by business domain. In fact, business domain experts, with help from component modelers, are in the best **position** to make this judgment.

. Bigger Business Components hide more complexity, which in general is a good thing...

...of them exist.

It's important to strike a balance, and keep in mind that the ideal **size** depends on the domain. If there's a question in one's mind, it makes sense to...

...a second iteration through the identification process.

The following steps describe one technique for identifying Business Components. Figure 43 illustrates this Business Component Identifying Methodology 4300 including both Planning and Delivering stages 4302, 4304.

I...

```
Set
       Items
                Description
                CALCULAT? OR COMPUT? OR FIGURE? ? OR FIGURING OR MEASUR?
      8631737
S1
                DEGREE()(COINCIDENCE? OR CO()INCIDENCE OR MATCHING OR SIM-
S2
         174
            ILAR? OR RELATIONSHIP?)
                (SEARCH? OR QUER? OR QUEST? OR REQUEST? OR QUESTION? OR IN-
s3
         4761
            OUIR? OR SEEK? OR FIND? OR LOOK?) (3N) (INPUT OR "IN" () PUT OR W-
S4
       163415
               (INFORMATION OR DATA OR RESULT?)(3N)(RETRIEV? OR RECEIV? OR
             RETURN?)
      8744636
                DISPLAY? OR OUTPUT OR OUT() PUT OR PRESENTED OR PRESENT OR -
S5
             REVEAL? OR VISUAL OR SHOW? OR EXPOS? OR VIEW?
S6
                S5 (3N) FEATURE () AMOUNT
                (INFORMATION OR DATA OR RESULT?) (3N) ((HIGHER OR SUPERIOR OR
s7
             UPPER) () S2)
S8
         2957
                (LARGER OR GREATER OR BIGGER) () SIZE
                (CLOSE() TO OR LYING() NEAR OR NEXT() TO OR ADJOINING OR ADJA-
S9
          327
             CENT) (2N) (CENTER OR MIDDLE OR MEDIAN OR MIDPOINT)
                COMPUTER(2W) (SCREEN? OR DISPLAY? OR MONITOR?) OR LCD OR CRT
S10
        71175
              OR FLAT () PANEL
                S1 AND S2 AND S3 AND S4
S11
                S1 AND S2 AND S3
S12
            0
               S1 AND S2 AND S4
S13
           1
S14
           3
               S2 AND S4
S15
        68343
               S4 AND S5
                S15 AND S6
S16
           Ω
                S4 (3N) (HIGHER OR SUPERIOR OR UPPER)
s17
          365
                S17 AND S2
           0
S18
              S17 AND S8
            0
S19
                S17 AND S9
S20
           0
           1
               S17 AND S10
S21
S22
           0
               SIZE AND POSITION AND IMAGE? AND S2
S23
           0 SIZE AND POSITION AND S2
S24
          11 SIZE AND S2
           8 POSITION AND S2
S25
S26
           0 S24 AND S9
           0 S25 AND S9
S27
          23 S13 OR S14 OR S21 OR S24 OR S25
S28
          12
               S28 NOT PY>1999
S29
               S29 NOT PD>19990129
S30
          12
           11 RD (unique items)
S31
       8:Ei Compendex(R) 1970-2004/Mar W2
File
         (c) 2004 Elsevier Eng. Info. Inc.
      35:Dissertation Abs Online 1861-2004/Feb
File
         (c) 2004 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2004/Feb 27
         (c) 2004 EBSCO Publishing
File 65:Inside Conferences 1993-2004/Mar W3
         (c) 2004 BLDSC all rts. reserv.
       2:INSPEC 1969-2004/Mar W2
File
         (c) 2004 Institution of Electrical Engineers
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
File 94:JICST-EPlus 1985-2004/Mar W2
         (c) 2004 Japan Science and Tech Corp(JST)
     99:Wilson Appl. Sci & Tech Abs 1983-2004/Feb
File
         (c) 2004 The HW Wilson Co.
File 95:TEME-Technology & Management 1989-2004/Mar W1
         (c) 2004 FIZ TECHNIK
```

```
Set
                Description
        Items
                CALCULAT? OR COMPUT? OR FIGURE? ? OR FIGURING OR MEASUR?
      7169735
S1
                DEGREE()(COINCIDENCE? OR CO()INCIDENCE OR MATCHING OR SIM-
S2
            ILAR? OR RELATIONSHIP?) ...
                                           The state of the state of
                (SEARCH? OR QUER? OR QUEST? OR REQUEST? OR QUESTION? OR IN-
S3
        20698
             QUIR? OR SEEK? OR FIND? OR LOOK?)(3N)(INPUT OR "IN"()PUT OR W-
                (INFORMATION OR DATA OR RESULT?) (3N) (RETRIEV? OR RECEIV? OR
S4
       635949
              RETURN?)
                DISPLAY? OR OUTPUT OR OUT() PUT OR PRESENTED OR PRESENT OR -
S5
      7362840
             REVEAL? OR VISUAL OR SHOW? OR EXPOS? OR VIEW?
                S5 (3N) FEATURE () AMOUNT
S6
                (INFORMATION OR DATA OR RESULT?) (3N) ((HIGHER OR SUPERIOR OR
S7
              UPPER)()S2)
S8
         7247
                (LARGER OR GREATER OR BIGGER) () SIZE
                (CLOSE()TO OR LYING()NEAR OR NEXT()TO OR ADJOINING OR ADJA-
s9
         3315
             CENT) (2N) (CENTER OR MIDDLE OR MEDIAN OR MIDPOINT)
                COMPUTER (2W) (SCREEN? OR DISPLAY? OR MONITOR?) OR LCD OR CRT
S10
       199362
              OR FLAT () PANEL
                S1 (S) S2 (S) S3 (S) S4
S11
                S1 (S) S2 (S) S3
            0
S12
            0
                S1 (S) S2 (S) S4
S13
S14
           16
                S1 (S) S2
               ~S2 (S) S4
S15
            2
       139369
                S4 (S) S5
S16
                S16 (S) S6
S17
            0
S18
         1874
                S4 (3N) (HIGHER OR SUPERIOR OR UPPER)
S19
            0
                S18 AND S2
            9
                S18 AND S8
S20
S21
            0
                S18 AND S9
                S18 AND S10
S22
           16
                S14 AND S22
S23
           0
                S14 OR S15 OR S20 OR S22
           42
S24
                S24 NOT PY>1999
           32
S25
S26
           31
                S25 NOT PD>19990129
           28
                RD (unique items)
S27
File 15:ABI/Inform(R) 1971-2004/Mar 26
         (c) 2004 ProQuest Info&Learning
File 647:CMP Computer Fulltext 1988-2004/Mar W2
         (c) 2004 CMP Media, LLC
File 275: Gale Group Computer DB(TM) 1983-2004/Mar 26
         (c) 2004 The Gale Group
File 674: Computer News Fulltext 1989-2004/Mar W2
         (c) 2004 IDG Communications ....
File 696:DIALOG Telecom. Newsletters 1995-2004/Mar 25
         (c) 2004 The Dialog Corp.
File 624:McGraw-Hill Publications 1985-2004/Mar 25
         (c) 2004 McGraw-Hill Co. Inc
File 636: Gale Group Newsletter DB(TM) 1987-2004/Mar 26
         (c) 2004 The Gale Group
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2004/Mar 26
         (c) 2004 PR Newswire Association Inc
File 16:Gale Group PROMT(R) 1990-2004/Mar 26
         (c) 2004 The Gale Group
File 160: Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 553:Wilson Bus. Abs. FullText 1982-2004/Feb
         (c) 2004 The HW Wilson Co
```

```
Set
        Items
                Description
                CALCULAT? OR COMPUT? OR FIGURE? ? OR FIGURING OR MEASUR?
S1
      7169735
                DEGREE() (COINCIDENCE? OR CO() INCIDENCE OR MATCHING OR SIM-
s2
           96
             ILAR? OR RELATIONSHIP?)
              (SEARCH? OR QUER? OR QUEST? OR REQUEST? OR QUESTION? OR IN-
S3
             OUIR? OR SEEK? OR FIND? OR LOOK?) (3N) (INPUT OR "IN" () PUT OR W-
S4
       635949
                (INFORMATION OR DATA OR RESULT?) (3N) (RETRIEV? OR RECEIV? OR
              RETURN?)
                DISPLAY? OR OUTPUT OR OUT() PUT OR PRESENTED OR PRESENT OR -
S5
      7362840
             REVEAL? OR VISUAL OR SHOW? OR EXPOS? OR VIEW?
                S5 (3N) FEATURE () AMOUNT
S6
s7
                (INFORMATION OR DATA OR RESULT?)(3N)((HIGHER OR SUPERIOR OR
              UPPER) () S2)
         7247
S8
                (LARGER OR GREATER OR BIGGER) () SIZE
                (CLOSE()TO OR LYING()NEAR OR NEXT()TO OR ADJOINING OR ADJA-
S 9
         3315
             CENT) (2N) (CENTER OR MIDDLE OR MEDIAN OR MIDPOINT)
S10
       199362
                COMPUTER (2W) (SCREEN? OR DISPLAY? OR MONITOR?) OR LCD OR CRT
              OR FLAT () PANEL
                S1 (S) S2 (S) S3 (S) S4
            0
S11
                S1 (S) S2 (S) S3
S12
            0
S13
            0
                S1 (S) S2 (S) S4
S14
           16
                S1 (S) S2
S15
           2
                S2 (S) S4
       139369
                S4 (S) S5
S16
                S16 (S) S6
S17
            0
         1874
                S4 (3N) (HIGHER OR SUPERIOR OR UPPER)
S18
                S18 AND S2
S19
            0
S20
            9
                S18 AND S8
S21
           0
                S18 AND S9
S22
           16
                S18 AND S10
S23
           0
                S14 AND S22
S24
           42
                S14 OR S15 OR S20 OR S22
           32
                S24 NOT PY>1999
S25
                S25 NOT PD>19990129
S26
           31
S27
           28
                RD (unique items)
File 15:ABI/Inform(R) 1971-2004/Mar 26
         (c) 2004 ProQuest Info&Learning
File 647:CMP Computer Fulltext 1988-2004/Mar W2
         (c) 2004 CMP Media, LLC
File 275: Gale Group Computer DB(TM) 1983-2004/Mar 26
         (c) 2004 The Gale Group
File 674: Computer News Fulltext 1989-2004/Mar W2
         (c) 2004 IDG Communications
File 696: DIALOG Telecom. Newsletters 1995-2004/Mar 25
         (c) 2004 The Dialog Corp.
File 624:McGraw-Hill Publications 1985-2004/Mar 25
         (c) 2004 McGraw-Hill Co. Inc
File 636: Gale Group Newsletter DB(TM) 1987-2004/Mar 26
         (c) 2004 The Gale Group
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2004/Mar 26
         (c) 2004 PR Newswire Association Inc
File 16: Gale Group PROMT(R) 1990-2004/Mar 26
         (c) 2004 The Gale Group
File 160: Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 553: Wilson Bus. Abs. FullText 1982-2004/Feb
         (c) 2004 The HW Wilson Co
```

*GEOGRAPHIC NAMES: US DESCRIPTORS: Software packages; World Wide Web; Information management; Web browser; Internet; Product introduction CLASSIFICATION CODES: 9190 (CN=United States); 8302 (CN=Software and computer services); 7500 (CN=Product planning & development); 5240 (CN=Software & systems) ...TEXT: Corporation, based in ByXlington, Massachusetts. Echo uses standard browsers (Internet Explorer or Netscape, release 3.0 and higher) to retrieve and integrate information from a variety of external and internal sources, including the Morld Wide Web, news feeds, Internet news ... continues, an agent using push technology would receive a ticker tape running across the bottom of the **computer screen** providing stock information or basic news. With Echo, the user would specify what stock information (s)he... (Item 3 from file: 15) 27/5,K/3 DIALOG(R) File 15:ABI/Inform(R) (c) 2004 ProQuest Info&Learning. All rts. reserv. 01500341 01-51329 **USE FORMAT 9 FOR FULL TEXT** NAFTA: Opportunities for U.S. domputer industry McCampbell, Atefeh Sadri Competitiveness Review v7n1 PP: 65-75 1997 ISSN: 1059-5422 JRNL CODE: DOC TYPE: Journal article LANGUAGE: English LENGTH: 11 Pages SPECIAL FEATURE: Appendix Reference WORD COUNT: 3607 ABSTRACT: The North American Free Trade Agreements (NAFTA) purports to eliminate barriers to free trade among the US, Canada and Mexico. One of NAFTA's prime advantages for the US is the possibility of new business opportunities. Based on collected data certain environmental factors and subfactors were most important in assessing the business potential for Mexico and Canada for the computer industry. These factors are market potential, social factors, cultural factors, and economic factors. GEOGRAPHIC NAMES: US; Canada; Mexico DESCRIPTORS: North American Free Trade Agreement \ Computer industry; Market potential; Studies; Economic theory; Social conditions & trends CLASSIFICATION CODES: 9190 /(CN=United States); 917% (CN=Canada); 9173 (CN=Latin America); 1300 (CN=International trade & foreign investment); 8651 (CN=Computer indystry); 1130 (CN=Economic theory); 7000 (CN=Marketing); 9130 (CN=Experimental/Theoretical); 1200 (CN=Social policy) ...TEXT: United States (Raiken, 1993).

Mexico is less technologically developed than Canada in many aspects. For example, computerized systems such as bar code scanners are rare in Mexico. Canada is automated to a degree similar to that of the United States. Canada has a fair amount of market saturation and an established...

27/5,K/11 (Item 11 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

00888957 95-38349

A conceptual database design approach based on rules and heuristics

Batra, D; Zanakis, S H

European Journal of Information Systems v3n3 PP: 228-239 Jul 1994

ISSN: 0960-085X JRNL CODE: EJI

DOC TYPE: Journal article LANGUAGE: English LENGTH: 12 Pages

SPECIAL FEATURE: Charts Appendix References

ABSTRACT: An effective data modeling methodology should employ the entity-relationship (ER) model for developing a conceptual representation that can them be translated into the relational form by a designer, or by a computer aided software engineering tool. A realistic and detailed approach for conceptual design using the ER model for relational databases ... is based on 4 rules that specify the order in which various types of relationships must be modeled, 3 rules that pertain to detection of derived relationships, and 3 heuristics based on observation of constructs in real applications. The rules for ordering of relationships include: 1. The degree of the relationship should be the minimum. 2. After identifying the entities, the designer should model the binary one-one and one-many relationships before any other relationships. 3. Then the designer should model ternary relationships that have the connectivity "one" on at least one side and then identify relationships of degree n + one that have connectivity "one" on at least one side. 4. In modeling relationships that have the connectivity "many" on each side, the presence of higher degree should be checked before that of lower degree relationships relationships .

DESCRIPTORS: Systems design; Relational data bases; Heuristic; Computer based modeling; Rules; Studies; Computer aided software engineering CLASSIFICATION CODES: 5240 (CN=Software & systems); 9130 (CN=Experimental/Theoretical)

...ABSTRACT: conceptual representation that can them be translated into the relational form by a designer, or by a **computer** aided software engineering tool. A realistic and detailed approach for conceptual design using the ER model for...

... side. 4. In modeling relationships that have the connectivity "many" on each side, the presence of higher degree relationships should be checked before that of lower degree relationships.

27/5,K/23 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2004 The Gale Group. All reserv.

02417088 Supplier Number: 44800202 (THIS IS THE FULLTEXT)

When redesign isn't necessary

Desktop Publishing Commentary, v10, n3, pN/A

July, 1994

ISSN: 0957-3178

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 4342

TEXT:

Should all documents be redesigned for screen display? Not necessarily. In some cases it is imperative that no redesign be done; in others it's not worth the bother.

Proofing and approvals: When Acrobat is used by a designer to communicate with a client about how a paper publication will look, the final appearance of the document determines the logic of the design. To alter it for Acrobat imaging would invalidate Acrobat's use as a proofing system. As the communication circuit in a proofing system is limited to few people, it is easier to ensure that everyone has a 24-bit display to see the document as it will appear in print.

Archiving and distributed printing: Here Acrobat is merely a convenient way of storing information and getting it intact onto someone else's system so they can print it. Take, for example, scientific journals